

This listing of claims replaces all prior versions, and listings of claims in the instant application:

**Listing of Claims:**

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising:

creating a public list including all public classes and interfaces defined in said object-oriented library  
wherein said all public classes and interfaces being  
written in an object-orientated computer programming  
language and said interfaces include methods, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and

storing said list.

4. (Previously Presented) The method of claim 3 wherein said object-oriented library is a Java™ package.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to represent an application programming interface (API) definition for an object-oriented library, the method comprising:

creating a public list including all public classes and interfaces defined in said object-oriented library  
wherein said all public classes and interfaces being  
written in an object-orientated computer programming  
language and said interfaces include methods, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and

storing said list.

11. (Previously Presented) The program storage device of claim 10 wherein said object-oriented library is a Java™ package.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Currently Amended) An apparatus for representing an application programming interface (API) definition for an object-oriented library, said apparatus comprising:

means for creating a public list including all public classes and interfaces defined in said object-oriented library wherein said all public classes and interfaces being written in an object-orientated computer programming language and said interfaces include methods, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and

means for storing said list.

18. (Previously Presented) The apparatus of claim 17 wherein said object-oriented library is a Java™ package.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising:

step for creating a public list including all public classes and interfaces defined in said object-oriented library wherein said all public classes and interfaces being written in an object-orientated computer programming language and said interfaces include methods, said public list including a class sublist for each of said public classes, each said class sublist including all direct and

indirect public superclasses of a class and excluding private classes; and  
step for storing said list.

23. (Previously Presented) The method of claim 22 wherein said object-oriented library is a Java™ package.

24. (Currently Amended) A method for determining a program hierarchy, said method comprising:

receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each element comprising a class or interface, wherein said each class or interface being written in an object-orientated computer programming language and said interface include at least one method each of said public elements including a sublist of all public hierarchically-related elements that are a parent of the element and excluding private classes; and

indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

25. (Previously Presented) The method of claim 24 wherein said object-oriented library is a Java™ package.

26. (Previously Presented) The method of claim 24, further comprising

comparing a first program hierarchy reconstructed from a first API definition file with a second program

hierarchy reconstructed from a second API definition file; and

indicating an error when said first program hierarchy is inconsistent with said second program hierarchy.

27. (Currently Amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to determine a program hierarchy, said method comprising:

receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each element comprising a class or interface, wherein said each class or interface being written in an object-orientated computer programming language and said interface include at least one method each of said public elements including a sublist of all public hierarchically-related elements that are a parent of the element and excluding private classes; and

indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

28. (Previously Presented) The program storage device of claim 27 wherein said object-oriented library is a Java™ package.

29. (Previously Presented) The program storage device of claim 27, said method further comprising:

comparing a first program hierarchy reconstructed from a first API definition file with a second program

hierarchy reconstructed from a second API definition file; and

indicating an error when said first program hierarchy is inconsistent with said second program hierarchy.

30. (Currently Amended) An apparatus for determining a program hierarchy, said apparatus comprising:

means for receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each element comprising a class or interface, wherein said each class or interface being written in an object-orientated computer programming language and said interface include at least one method each of said public elements including a sublist of all public hierarchically-related elements that are a parent of the element and excluding private classes; and

means for indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

31. (Previously Presented) The apparatus of claim 30 wherein said object-oriented library is a Java™ package.

32. (Previously Presented) The apparatus of claim 30, said apparatus further configured to:

compare a first program hierarchy reconstructed from a first API definition file with a second program hierarchy reconstructed from a second API definition file; and

indicate an error when said first program hierarchy is inconsistent with said second program hierarchy.

33. (Currently Amended) A method for determining a program hierarchy, said method comprising:

step for receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each element comprising a class or interface, wherein said each class or interface being written in an object-orientated computer programming language and said interface include at least one method each of said public elements including a sublist of all public hierarchically-related elements that are a parent of the element and excluding private classes; and

step for indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

34. (Previously Presented) The method of claim 33 wherein said object-oriented library is a Java™ package.

35. (Previously Presented) The method of claim 34, further comprising

step for comparing a first program hierarchy reconstructed from a first API definition file with a second program hierarchy reconstructed from a second API definition file; and

step for indicating an error when said first program hierarchy is inconsistent with said second program hierarchy.